

# Work Order ID 71157

Monday, July 11, 2011 11:08:17 AM



Page 1

Item ID:	D4150-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Attachment Arm Assembly					
Start Date:	6/23/2011	Start Qty: <del>4.00</del> <sup>3</sup>		Cust Item ID:		
Required Date:	7/13/2011	Req'd Qty: 4.00		Customer:		

## Reference:

Approvals:	Process Plan:	Date: <u>11-07-11</u>	Tooling:		Date:		Run	Start	
	QC:	Date:	SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4150	B

100		0.00
Small Fab	Memo	0.00
Small Fab	1- Assemble as per dwg	

11/08/24 (3)

110	QC5- Inspect part completeness to step on W/O	0.00
QC	Memo	0.00
Quality Control		

11/08/24

(+3)

120	Identify as per dwg & Stock Location: <u>8734</u>	0.00
Packaging	Memo	0.00
Packaging		

3x 8p 11-08-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 71157**

Monday, July 11, 2011 11:08:17 AM



Page 2

Item ID: D4150-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Attachment Arm Assembly

Start Date: 6/23/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 7/13/2011 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/8/31

mk  
11-08-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, July 11, 2011 11:08:24 AM

Page 1

Work Order ID: 71157

Parent Item: D4150-041

Parent Item Name: Attachment Arm Assembly




Start Date: 6/23/2011

Required Date: 7/13/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC  
IPP Rev:B 10.07.22 as per revB DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<input checked="" type="checkbox"/> AN3C13A  Bolt		Purchased	No			100	Each	54.0000	2	8			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
ST351 54													
115768 4													
117366 50													
<input checked="" type="checkbox"/> D4150-1  Arm		Manufactured	No			100	Each	4.0000	1	4			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
ST133 4													
71158 4													
<input checked="" type="checkbox"/> D4150-3  Arm Plate		Manufactured	No			100	Each	4.0000	2	8			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
ST133 4													
69629 4													

*EP 11/08/24*

*EP 11/08/24*

*72198 87105 (5x)*

*EP 11/08/24*

*8*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, July 11, 2011 11:08:24 AM

Page 2

Work Order ID: 71157

Parent Item: D4150-041

Parent Item Name: Attachment Arm Assembly

Start Date: 6/23/2011

Required Date: 7/13/2011

Start Qty: 4.00

Required Qty: 4.00

~~MS~~21043-3

Purchased

No

100

Each

989.0000

2

8



Nut



*Ep 4/08/24*

Location

Loc Qty

Loc Code

FG

72

103691

72

ST301

917

112314

69

118077

848

6

~~NAS~~1149C0332R

Purchased

No

100

Each

1,001.000

4

16



Washer



*Ep 4/08/24*

Location

Loc Qty

Loc Code

FP-B

7

117291

7

ST297

994

116304

55

117460

62

117887

247

118078

2

118179

628

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

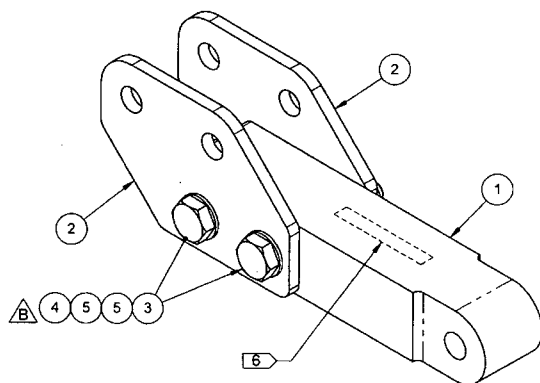
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





**D4150-041 ATTACHMENT ARM ASSY**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4150-041	ATTACHMENT ARM ASSY
1	1	D4150-1	ARM
2	2	D4150-3	ARM PLATE
3	1	AN3C13A	BOLT
4	1	MS21043-3	NUT
5	2	NAS1149C0332R	WASHER

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 71157  
RA 11-07-11

**RELEASED**  
2010-07-16  
*MB*

- NOTES:  
1) MATERIAL: N/A  
2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: N/A  
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4150-041" USING FINE POINT PERMANENT INK MARKER  
7) WEIGHT: 0.82 lbs

B	REPLACED QTY(3) MS20615-4M20 WITH QTY(2) EACH AN3C13A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN C6-2, C7-2, B4-3 & B5-3). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.08
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.07.08		

<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. <b>D4150</b>	REV. B SHEET 1 OF 3
TITLE <b>ATTACHMENT ARM ASSY</b>	SCALE NTS
COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

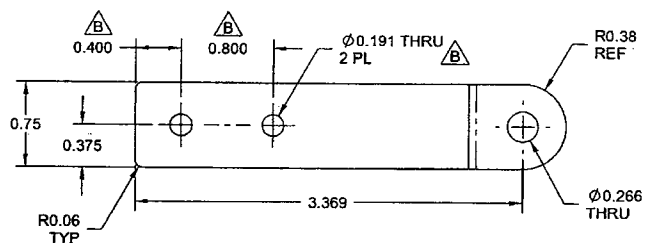
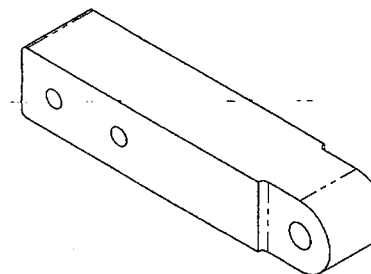
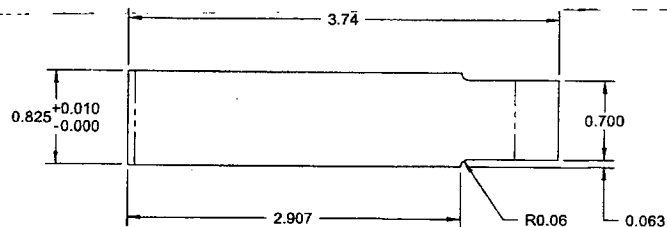
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4150-1 ARM**

71157

**RELEASED**  
2010-07-16  
MP

**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276  
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.60 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4150	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		ATTACHMENT ARM ASSY	NTS
DATE	10.07.08	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

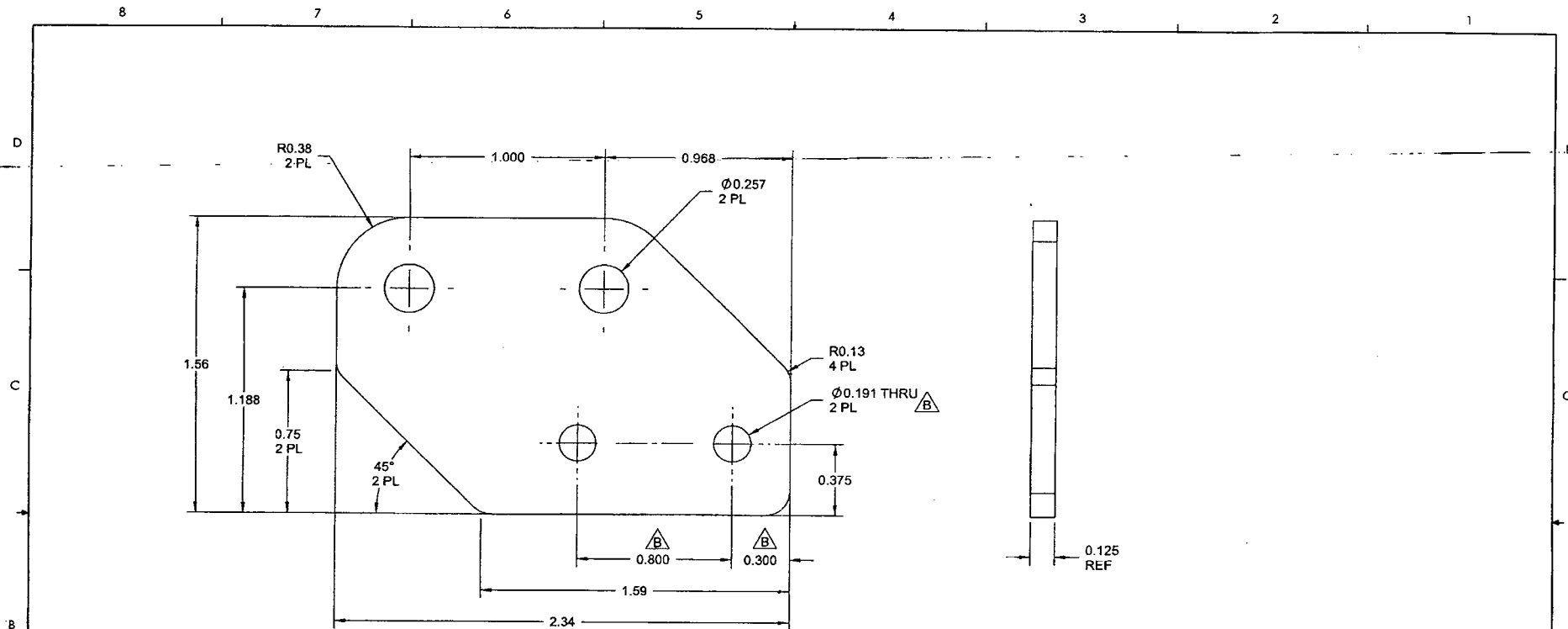
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4150-3 ARM PLATE**

M1157

**RELEASED**  
2010-07-16

**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" THICK SHEET ANNEALED 2B FINISH, PER MIL-S-5058 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.10 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4150	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>ATTACHMENT ARM ASSY</b>	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries